REMARKS

The amendment to the claims set forth herein does not reduce the scope of the claims as filed.

Respectfully submitted,

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CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited on November 21, 2002 with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C., 20231.

Date: November 21, 2002

Patricia Beilmann

ATTACHMENT A - S/N 09/721,264

MARKED UP COPY OF THE AMENDED CLAIMS

13. (Once amended) A process for fabricating a magnetic media hard disk comprising [the steps of]:

fabricating a magnetic media layer upon a surface material of a substrate;

fabricating a diamond-like carbon (DLC) layer upon said magnetic layer[, including the steps of] by:

fabricating an initial thickness DLC layer portion upon said magnetic layer utilizing a relatively low ion carbon beam energy;

fabricating a subsequent thickness DLC layer portion upon said initial thickness DLC layer portion utilizing a relatively high carbon ion beam energy.

16. (Once amended) A process for fabricating a magnetic media hard disk as described in claim 13, including [the further step of] fabricating an intermediate thickness DLC layer portion between said initial DLC layer portion and said subsequent DLC layer portion, wherein said intermediate thickness DLC layer portion is fabricated utilizing a relatively mid-range carbon ion beam energy between said relatively low carbon ion beam energy and said relatively high carbon ion beam energy.

22. (Once amended) A method for fabricating a magnetic media hard disk comprising [the steps of]:

fabricating a magnetic material layer upon a material surface of a substrate;

fabricating a diamond-like carbon (DLC) layer upon said magnetic layer, wherein said DLC layer is fabricated [in the steps of] by:

depositing carbon ion species upon said magnetic layer utilizing a relatively low carbon ion beam energy of from approximately 10 eV to approximately 20 eV, to deposit an initial DLC layer thickness;

subsequently increasing the carbon ion beam energy level as the thickness of said DLC layer increases due to deposition of carbon ion species within said DLC layer, such that higher energy carbon ion beam species become implanted within said DLC layer thickness.

ATTACHMENT B S/N 09/721,264

MARKED-UP COPY OF ABSTRACT

ENERGY GRADIENT ION BEAM DEPOSITION OF CARBON OVERCOATS ON RIGID DISK MEDIA FOR MAGNETIC RECORDINGS

[In the energy gradient ion beam deposition technique of the present invention, the] The fabrication of the overcoat layer starts with a low energy ion beam to avoid magnetic layer implantation problems, followed by higher deposition energies where the higher energy atoms are implanted into the previously formed lower energy overcoat layer, rather than the magnetic layer. The energy gradient ion beam deposition process therefore results in a thin overcoat layer that is denser than a comparable layer formed by low energy magnetron sputtering, and which overcoat layer provides good mechanical and corrosion protection to the magnetic layer, without degrading the magnetic properties of the magnetic layer. [Where a magnetic media hard disk of the present invention is utilized within a hard disk drive, the thinner overcoat layer allows the magnetic head of the disk drive to fly closer to the magnetic media layer, thereby facilitating an increase in the areal data storage density of the hard disk drive.]